

Notice of Allowability

Application No.

10/046,398

Examiner

Matthew B. Smithers

Applicant(s)

CARONNI ET AL.

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on January 30, 2006.
2. ☒ The allowed claim(s) is/are 1-51.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven Ashburn on April 11, 2006.

The application has been amended as follows:

IN THE CLAIMS:

Please replace original claims 41 and 42 with the amended claims below:

41. (Currently Amended) A computer-readable ~~medium~~ storage device containing instructions for performing a method for accessing information in a memory, the method comprising:

receiving, at a memory management unit, virtual address information from a processor;

retrieving a key tag and physical address information corresponding to the virtual address information;

sending, from the memory management unit to the processor, a key tag and physical address information corresponding to the virtual address information;

determining whether a memory location corresponding to the physical address information is protected based on the key tag;

accessing a secret key in a secret key table using the key tag based on the determining; and

decrypting information read from the memory location using the secret key.

42. (Currently Amended) A computer-readable ~~medium~~ storage device containing instructions for performing a method for loading encrypted information into a memory, the method comprising:

determining whether a header associated with a program block includes an encrypted secret key;

decrypting the encrypted secret key to form a decrypted secret key when a result of the determination indicates that the header includes an encrypted secret key;

storing the decrypted secret key in a secret key table;

assigning the decrypted secret key a key tag for use in retrieving the decrypted secret key from the secret key table;

loading the program block into the memory at a first memory location; and

associating the key tag with virtual address information and physical address information corresponding to the memory location, wherein information read from the first memory location is decrypted using the decrypted secret key.

Allowable Subject Matter

Claims 1-51 are allowed.

The following is an examiner's statement of reasons for allowance: The present invention is directed to a method and apparatus for accessing protected information in a secure memory location. Independent claims 1, 9, 10, 15, 22, 30, 43, and 51, each recite the uniquely distinct feature of "determining based on the key tag that a memory location corresponding to a physical address is protected. Independent claims 16, 35, and 50, each recite the combined uniquely distinct features of "determining whether a header associated with a program block includes an encrypted secret key; decrypting the encrypted secret key to form a decrypted secret key when a result of the determination indicates that the header includes an encrypted secret key; assigning the decrypted secret key a key tag for use in retrieving the decrypted secret key from the secret key table; and associating the key tag with virtual address information and physical address information corresponding to the memory location, wherein information read from the first memory location is decrypted using the decrypted secret key. The closest prior art, Taguchi (US patent 5,915,025) fails to anticipate or render the above underlined limitations obvious.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Matthew B Smithers
Primary Examiner
Art Unit 2137